

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 01-309961  
(43)Date of publication of application : 14.12.1989

(51)Int.Cl.

C23C 14/34

(21)Application number : 63-140331  
(22)Date of filing : 07.06.1988

(71)Applicant : HITACHI METALS LTD  
(72)Inventor : TANIGUCHI SHIGERU  
OGATA KENJI

#### (54) CR-CU TARGET MATERIAL AND ITS PRODUCTION

(57) Abstract:

(57) **Abstract:**  
**PURPOSE:** To manufacture a uniform Cr-Cu alloy target free from component segregation by filling a capsule with a mixture of respective powders of Cr and Cu in the prescribed proportion and then compacting the above by a hot isostatic pressing method at the time of manufacturing a sputtering target made of Cr-Cu alloy.

**CONSTITUTION:** At the time of manufacturing a Cr-Cu alloy target in which  $\leq 0$  atomic% of fine Cu grains are uniformly dispersed in a Cr matrix, a thick-walled capsule made of soft steel is filled with a powder mixture prepared by mixing respective powders of Cr and Cu in the above proportion, which is subjected to hot isostatic pressing treatment. The above capsule is subjected to vacuum deaeration treatment and then to hot isostatic pressing treatment again, e.g., at  $1180^{\circ}\text{C}$  and 1000atm for 2hr, and then, the capsule is removed by cutting and further grinding is carried out, by which the high-quality Cr-Cu alloy sputtering target free from component segregation can be manufactured.

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C) 1998,2003 Japan Patent Office